

REMARKS

Claims 1-38 are pending in the application prior to entering this Amendment. The Examiner rejects claims 7 and 22 under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter that applicant regards as the invention. The Examiner rejects claims 1, 4, 6, 8, 12-13, 18-19, 21, 23 and 27-28 under 35 U.S.C. § 102(b) as being anticipated by Rao (U.S. Patent No. 5,828,786). The Examiner rejects claims 33-38 under 35 U.S.C. § 102(e) as being anticipated by Kuwano (U.S. Pat. No. 6,366,699). The Examiner rejects claims 9-11, 14-17, 24-26, and 29-32 under 35 U.S.C. § 103(a) as being unpatentable over Rao et al. (U.S. Patent No. 5,828,786). The Examiner rejects claims 9-11, 14-17, 24-26, and 29-32 under 35 U.S.C. § 103(a) as being unpatentable over Rao.

The Applicants amend claims 16 and 25 and cancels claims 7, 22, and 33-38. Claims 1-6, 8-21, and 23-32 remain in the application.

The Applicants add no new matter and request reconsideration.

Claim Rejections Under § 112

The Applicants amend claims 7 and 22 to obviate the Examiner's rejection. In particular, the Applicants define j to more clearly point out and distinctly claim the invention.

Claim Rejections Under § 102 and 103

The Examiner alleges each element recited in claims 1, 4, 6, 8, 12-13, 18-19, 21, 23 and 27-28 is disclosed in Rao. The Examiner rejects claims 2-3, 5, and 20 as obvious over Rao in view of the Applicant's Admitted Prior Art (AAPA). The Applicants disagree for the reasons that follow.

Claim 1 recites *a plurality of pattern detection state machines...for detecting a pattern in said video sequence in accordance with a preset threshold*. Claim 18 recites a similar limitation. The Examiner alleges the state machines shown in Figures 5a and 5b disclose the recited pattern detection state machines. But the state machines shown in Figures 5a and 5b do not detect a pattern, e.g., a film mode pattern, in accordance with a *preset threshold* as recited. Rather state machines shown in Figures 5a and 5b detect whether the input video stream meets certain "status conditions" defined in Table 1. Rao, column 18, lines 13-23. These status conditions do not include any kind of preset threshold as recited in the claims. Table 1, for example, explains condition C0 as $(RF \& 0x03 == 0x02 \parallel ((RF \& 0x03 == 0x03) \&\& (OEC \& 0x02)))$, where RF is the repeated field register and OEC is the odd/even

compare register. Status conditions appear to be met if a comparison of fields in varying registers meets certain logic. Neither the fields in registers nor the logic associated with the status conditions appear to have any relation to a preset threshold as required by the claims.

The Examiner alleges the preset threshold is "met by the type of input and the desired output." The Examiner's allegation is unclear. The desired output in any instance is *always* going to be one that produces the best picture quality regardless of input. Each of the plurality of state machines recited detects patterns by analyzing accumulations of quantized motion differences and comparing those accumulations to preset thresholds. No such pattern detection in accordance with a preset threshold occurs in Rao.

Claim 1 recites *wherein said pattern detecting state machine varies said preset threshold in accordance with said signals*. Claim 18 recites a similar limitation. Rao does not disclose a plurality of state machines that pattern detect according to a preset threshold, as we discuss above, much less a plurality of state machines that vary the preset threshold in accordance with the video sequence. The Examiner failed to provide any discussion of this varying limitation in his office action. Rao does not appear to disclose state machines that operate responsive to or in accordance with any preset thresholds, much less disclose state machines that vary the preset thresholds according to the video sequence signals as required by the claims.

The Examiner rejects claims 9-11, 14-17, 24-26, and 29-32 as obvious over Rao in view of Examiner's Official Notice. MPEP § 2144.03 permits an Examiner to take Official Notice in those rare circumstances where the facts asserted to be well known are capable of "instant and unquestionable demonstration as being well-known." No such instant and unquestionable demonstration of the asserted facts exists here.

And MPEP § 2144.03 makes it inappropriate for an Examiner to take Official Notice of "technical facts in the areas of esoteric technology or specific knowledge of the prior art." The Applicants ask the Examiner to provide documentary evidence of those facts for which he takes Official Notice, namely, of a system that performs motion compensation by calculating differences between pixels in a field, quantizing the differences, and determining whether the differences exceed a threshold and of subtitle detection.

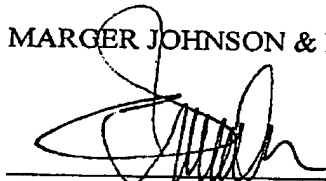
Conclusion

Applicants request reconsideration and allowance of all remaining claims. Applicants encourage the Examiner to telephone the undersigned at (503) 222-3613 if it appears that an interview would be helpful in advancing the case.

Customer No. 20575

Respectfully submitted,

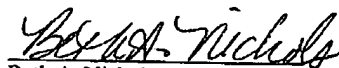
MARGER JOHNSON & McCOLLOM, P.C.



Graciela G. Cowger
Reg. No. 42,444

MARGER JOHNSON & McCOLLOM
1030 SW Morrison Street
Portland, OR 97205
(503) 222-3613

I hereby certify that this correspondence
is being transmitted to the U.S. Patent and
Trademark Office via facsimile number
(703) 872-9306, on January 18, 2005.


Beth A. Nichols